



U.S. Department  
of Transportation

National Highway  
Traffic Safety  
Administration

400 Seventh Street, S.W.  
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

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AUTO SAFETY HOTLINE  
(800) 424-8393  
Wash. D.C. Area 366-0123

**CASE SUMMARY**PSU 11 CASE NO. 137F TYPE OF ACCIDENT Car sideswiped Jersey barrier**A. DESCRIPTION OF THE ACCIDENT SEQUENCE AND ACCIDENT PECULIARITIES**

(Provide a summary of the accident sequence as well as any particular event of the accident that is noteworthy. Injury mechanism and vehicle crashworthiness is the focus, not driver culpability. Do not include any personal identifiers.)

The 1988 Saab 900 was heading eastbound on the urban, two lane roadway when the driver evidently fell asleep and rode off the left side of the roadway and struck the cement Jersey barrier at a shallow, sideswiping angle. The vehicle actually rode up the barrier, and as it did so the driver, who had his left elbow/arm protruding through the left window struck the barrier. As the car descended the barrier the driver slammed on the brakes and cranked the wheel to the right-putting the car into a sharp clockwise yaw. At this time the left rear portion of the car struck the median again. The car then rolled across the three lanes (ramp) and came to rest on its wheels in the grassy area off roadway. The restrained driver sustained an abraded elbow, and sought medical treatment the next day. The car was towed and subsequently totalled. The car held up very well, with only slight roof crush. The hatch latch and hinges failed, but no potential safety bulletin has been filed due to the high speed of this crash and the overall performance of the body. The driver had on both the automatic shoulder and manual belt.

**B. VEHICLE PROFILE(S)**

| Vehicle No. | Class of Vehicle | Year/Make/Model | Most Severe Damage Based on Vehicle Inspection |                      | Component Failure               |
|-------------|------------------|-----------------|--|----------------------|---------------------------------|
|             |                  |                 | Damage Plane                                   | Severity Description |                                 |
| 01          | Subcompact       | 1988 Saab 900   | Left   | Moderate             | NONE Latch, hinge door failures |

**DO NOT SANITIZE THIS FORM**

### C. PERSON PROFILE(S)

| Vehicle No. | Person Role | Seat Position | Restraint Use | Most Severe Injury<br>(TO BE COMPLETED BY ZONE CENTER) |             |     |                   |
|-------------|-------------|---------------|---------------|--|-------------|-----|-------------------|
|             |             |               |               | Body Region  | Injury Type | AIS | Injury Source     |
| 01          | Driver      | F-Left        | L&Shoulder    | Elbow  | Abrasion    | 1   | NEWJERSEY BARRIER |

#### Body Region

Abdomen  
 Ankle—foot  
 Arm (upper)  
 Back-thoracolumbar spine  
 Chest  
 Elbow  
 Face  
 Forearm  
 Head—skull  
 Knee  
 Leg (lower)  
 Lower limbs(s) (whole or unknown part)  
 Neck—cervical spine  
 Pelvic—hip  
 Shoulder  
 Thigh  
 Upper limb(s) (whole or unknown part)  
 Whole body  
 Wrist—hand

#### Brain

Ears  
 Eye  
 Heart  
 Kidneys  
 Liver  
 Mouth  
 Noise  
 Pulmonary—lungs  
 Spleen  
 Thyroid, other endocrine gland  
 Vertebrae

#### Injury Type

Abrasion  
 Amputation  
 Avulsion  
 Burn  
 Concussion  
 Contusion  
 Crush  
 Detachment, separation

#### Dislocation

Fracture  
 Fracture and dislocation  
 Laceration  
 Other  
 Perforation, puncture  
 Rupture  
 Sprain  
 Strain  
 Total severance, transection  
 Unknown

#### Abbreviated Injury Scale

(1) Minor injury  
 (2) Moderate injury  
 (3) Serious injury  
 (4) Severe injury  
 (5) Critical injury  
 (6) Maximum (untreatable)  
 (7) Injured, unknown severity

**DO NOT SANITIZE THIS FORM**



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# ACCIDENT COLLISION DIAGRAM

1 of 4

BEST AVAILABLE

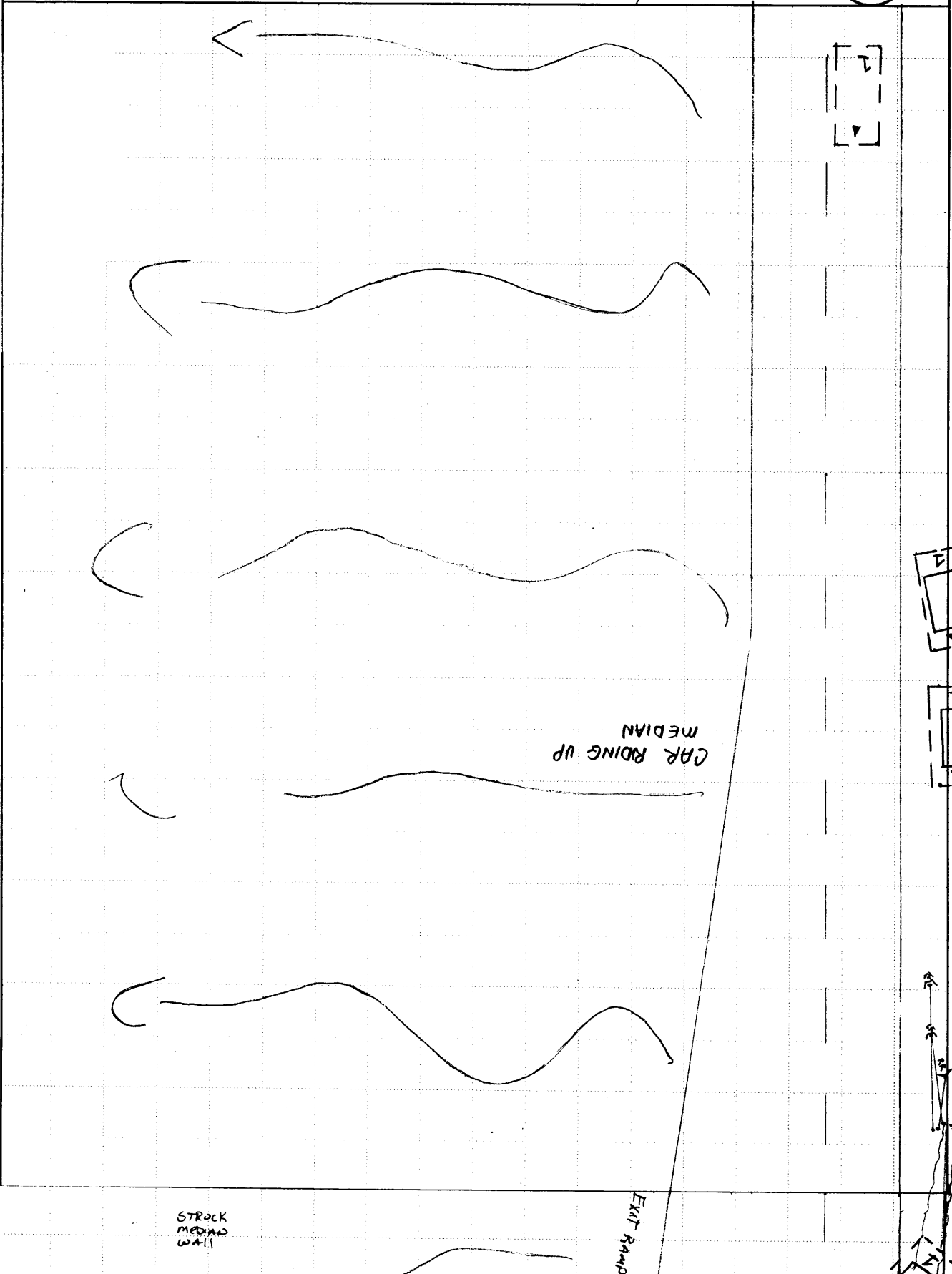
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

PSU No. 11

Case Number—Stratum 137F

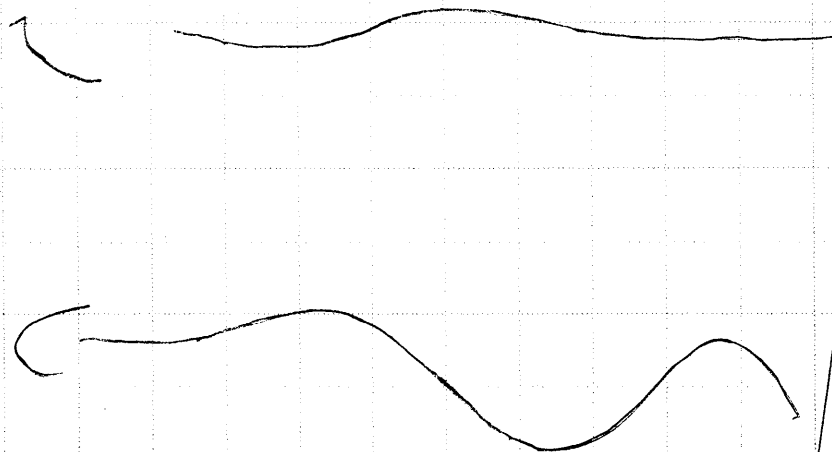
1/250

Indicate  
North

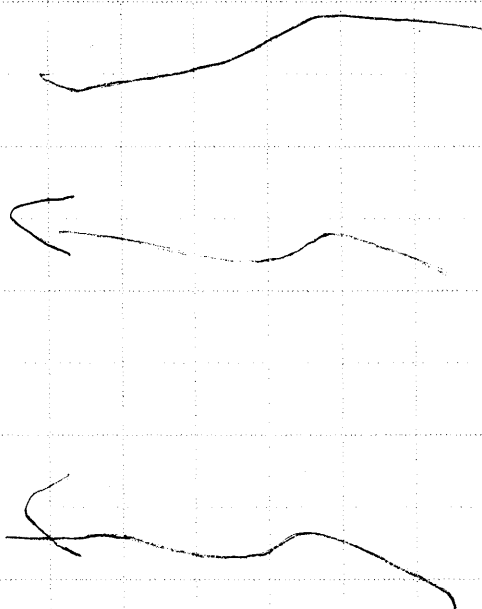




CAR RIDING UP  
MEDIAL

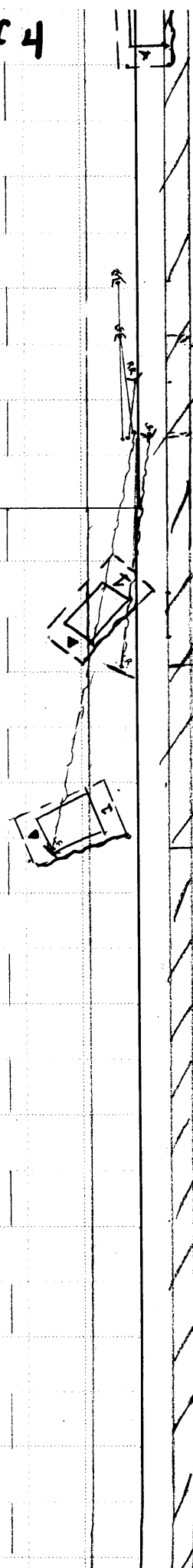


STOCK  
MEDIAL  
WALL



Exit Ramp

BEST AVAILABLE

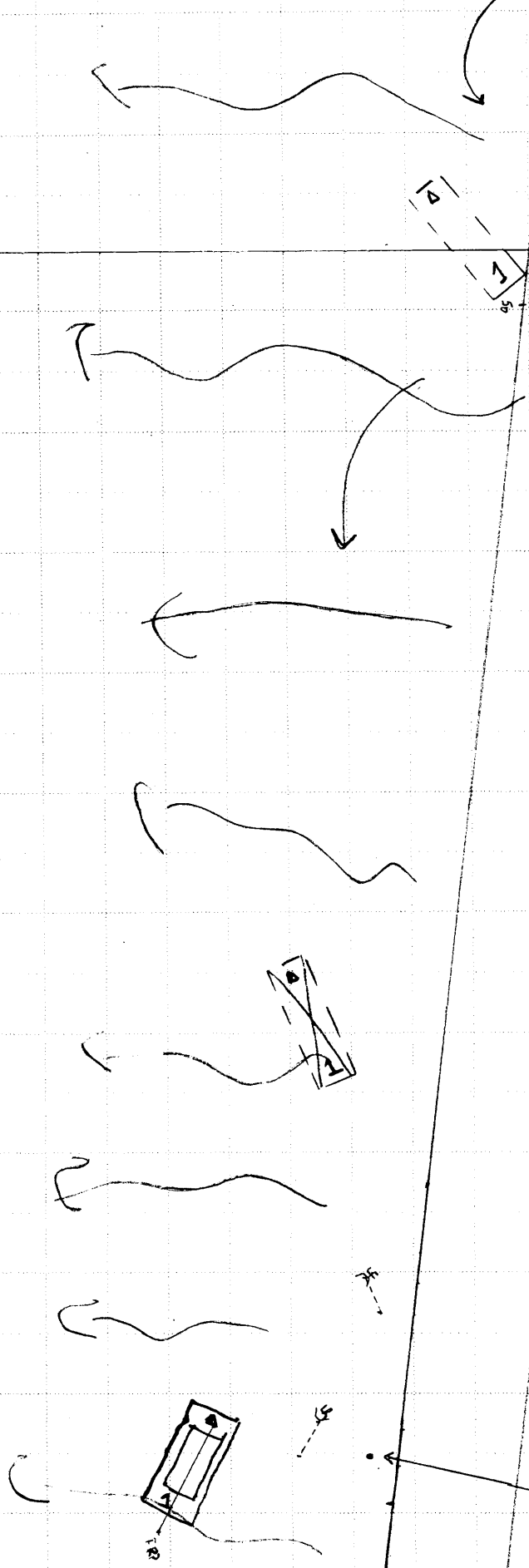


BEST AVAILABLE

BP

50

4 of 4



Possibly struck  
Delimitation post

BEST AVAILABLE



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# ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

Primary Sampling Unit Number 11Case Number—Stratum 137F

## ACCIDENT COLLISION DIAGRAM

LEVEL I  
PHYSICAL EVIDENCE ABSENT

To be accomplished when there is no  
physical evidence present at the scene:

- \* approximate vehicle orientation at impact and final rest
- \* applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)
- \* applicable traffic controls (e.g., speed limit)
- \* north arrow placed on diagram
- \* sketch required

LEVEL II  
PHYSICAL EVIDENCE PRESENT

In addition to the level I tasks noted above,  
the following must be accomplished when

LEVEL II (Cont'd)  
physical evidence is present:

- \* document reference point and reference line relative to physical features present at the scene
- \* scale documentation of all accident induced physical evidence
- \* scaled documentation of all roadside objects contacted
- \* roadway surface type and condition of applicable roadways
- \* grade measurements for all applicable roadways and at location of rollover initiation
- \* scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

## CRASH DATA

VEH. #1 VEH. #2 VEH. #3

Heading Angle \_\_\_\_\_

Surface Type \_\_\_\_\_

Surface Condition \_\_\_\_\_

Grade (v/h) Measurement (between impact and final rest) \_\_\_\_\_

Grade (v/h) Measurement (at location of rollover initiation) \_\_\_\_\_

Reference Point: Tip of goreReference line: S roadway edge

| Item                        | Distance and Direction from Reference Point | Distance and Direction from Reference Line |
|-----------------------------|---|--|
| Median contact beg ends     | 4.1-5.9 W                                   | 8.6-12 N                                   |
| LF beg                      | 90.9 E                                      | 2.15                                       |
| LF ends (trip)              | 92.2 E                                      | 1.55                                       |
| LR beg                      | 97E   | 3.55                                       |
| LR ends (trip)              | 98.5E                                       | 4.05                                       |
| Possible struck delineation | 98.2E                                       | 1.15                                       |
| FRP                         | 97.6-102.2 E                                | 7.6-9.55                                   |
|                             |   |  |
|                             |   |  |
|                             |   |  |
|                             |   |  |
|                             |   |  |
|                             |   |  |

[illegible]

93 - Went out again



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## ACCIDENT COLLISION MEASUREMENT TABLE

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

|   |   |  |  |
|---|---|--|--|
| Primary Sampling Unit Number <u>11</u>  |   | Case Number - Stratum <u>137E</u>  |  |
| <b>ACCIDENT COLLISION DIAGRAM</b>   |   | <b>CRASH DATA</b>  |  |
| <b>LEVEL I<br/>PHYSICAL EVIDENCE ABSENT</b><br><br>To be accomplished when there is no physical evidence present at the scene:<br><br>*approximate vehicle orientation at impact and final rest<br><br>*applicable road/roadway delineation (e.g., curbs/edge lines, lane markings, median markings, pavement markings, etc.)<br><br>*applicable traffic controls (e.g., speed limit)<br><br>*north arrow placed on diagram<br><br>*sketch required | <b>LEVEL II (Cont'd)</b><br>accomplished when physical evidence is present:<br><br>*document reference point and reference line relative to physical features present at the scene<br><br>*scaled documentation of all accident induced physical evidence<br><br>*scaled documentation of all roadside objects contacted<br><br>*roadway surface type and condition of applicable roadways<br><br>*grade measurements for all applicable roadways<br><br>*scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:<br>a) physical evidence, or<br>b) reconstructed accident dynamics | VEH. #1    VEH. #2    VEH. #3<br><br>Heading Angle    _____    _____    _____<br><br>Surface Type    _____    _____    _____<br><br>Surface Condition    _____    _____    _____<br><br>Grade Measurement (v/h)    _____    _____    _____ |  |
| <b>LEVEL II<br/>PHYSICAL EVIDENCE PRESENT</b><br><br>In addition to the Level I tasks noted above, the following must be  |   |  |  |
| Reference Point: <u>#2 Big strike on med</u>  |   | Reference Line: <u>Median</u>  |  |
| <u>30.7M W of RP #1</u>   |   |  |  |
| Item  | Distance and Direction<br>from Reference Point  | Distance and Direction<br>from Reference Line  |  |
| <u>Strike beg</u>   | <u>0</u>  | <u>0</u>   |  |
| <u>End</u>  | <u>6.0M E</u>   | <u>0</u>   |  |
| <u>Big RF</u>   | <u>16.3M E</u>  | <u>2.15</u>  |  |
| <u>Big RR</u>   | <u>20.8M E</u>  | <u>1.55</u>  |  |
| <u>End RR</u>   | <u>23.4 E</u>   | <u>1.95</u>  |  |
| <u>End RF</u>   | <u>23.4 E</u>   | <u>2.05</u>  |  |
| <u>Big LF</u>   | <u>18.7 E</u>   | <u>2.1</u>   |  |
| <u>Med LF</u>   | <u>23.2</u>   | <u>1.4</u>   |  |
| <u>Big LR</u>   | <u>23.2</u>   | <u>.7</u>  |  |
| <u>End LR</u>   | <u>33.8</u>   | <u>2.1</u>   |  |
| <u>End LF</u>   | <u>42</u>   | <u>5.23</u>  |  |
|   |   |  |  |

Med  
3.5M





## ACCIDENT FORM

1. Primary Sampling Unit Number 11

2. Case Number - Stratum 137F

### IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted 01

4. Date of Accident  
(Month, Day, Year) 9 3

5. Time of Accident 0200

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

### SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS14-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6. 0 SS14 Fatal AOPS 0

7. 0 SS15 Administrative Use 0

8. 0 SS16 0

9. 0 SS17 0

10. 0 SS18 0

### NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident 03

Code the number of events which occurred  
in this accident. 02

### ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object on the right.

| Accident Event<br>Sequence<br>Number | Vehicle<br>Number | Class Of<br>Vehicle | General<br>Area of<br>Damage | Vehicle Number<br>or<br>Object Contacted | Class Of<br>Vehicle | General<br>Area of<br>Damage |
|--------------------------------------|-------------------|---------------------|------------------------------|--|---------------------|------------------------------|
| 12. <u>0 1</u>                       | 13. <u>01</u>     | 14. <u>01</u>       | 15. <u>F</u>                 | 16. <u>54</u>                            | 17. <u>00</u>       | 18. <u>0</u>                 |
| 19. <u>0 2</u>                       | 20. <u>01</u>     | 21. <u>01</u>       | 22. <u>X F</u>               | 23. <u>54</u>                            | 24. <u>00</u>       | 25. <u>0</u>                 |
| 26. <u>0 2</u>                       | 27. <u>01</u>     | 28. <u>01</u>       | 29. <u>T</u>                 | 30. <u>31</u>                            | 31. <u>00</u>       | 32. <u>N</u>                 |
| 33. <u>0 4</u>                       | 34. <u>    </u>   | 35. <u>    </u>     | 36. <u>    </u>              | 37. <u>    </u>                          | 38. <u>    </u>     | 39. <u>    </u>              |
| 40. <u>0 5</u>                       | 41. <u>    </u>   | 42. <u>    </u>     | 43. <u>    </u>              | 44. <u>    </u>                          | 45. <u>    </u>     | 46. <u>    </u>              |

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT



## CODES FOR CLASS OF VEHICLE

- (00) Not a motor vehicle
- (01) Subcompact/mini (wheelbase < 254 cm)
- (02) Compact (wheelbase ≥ 254 but < 265 cm)
- (03) Intermediate (wheelbase ≥ 265 but < 278 cm)
- (04) Full size (wheelbase ≥ 278 but < 291 cm)
- (05) Largest (wheelbase ≥ 291 cm)
- (09) Unknown passenger car size
- (11) Compact utility vehicle
- (12) Large utility vehicle (≤ 4,500 kgs GVWR)
- (13) Passenger van (≤ 4,500 kgs GVWR)
- (14) Other van (≤ 4,500 kgs GVWR)
- (15) Pickup truck (≤ 4,500 kgs GVWR)
- (18) Other truck (≤ 4,500 kgs GVWR)
- (19) Unknown light truck type
- (20) School bus
- (21) Other bus
- (22) Truck (> 4,500 kgs GVWR)
- (23) Tractor without trailer
- (24) Tractor-trailer(s)
- (25) Motored cycle
- (28) Other vehicle
- (99) Unknown

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

### CDS APPLICABLE AND OTHER VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back
- (T) Top
- (U) Undercarriage
- (9) Unknown

### TDC APPLICABLE VEHICLES

- (O) Not a motor vehicle
- (N) Noncollision
- (F) Front
- (R) Right side
- (L) Left side
- (B) Back of unit with cargo  
area (rear of trailer or  
straight truck)
- (D) Back (rear of tractor)
- (C) Rear of cab
- (V) Front of cargo area
- (T) Top
- (U) Undercarriage
- (9) Unknown

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

### (01-30) — Vehicle Number

#### Noncollision

- (31) Overturn — rollover
- (32) Fire or explosion
- (33) Jackknife
- (34) Other intraunit damage (specify): \_\_\_\_\_

(35) Noncollision injury

(38) Other noncollision (specify): \_\_\_\_\_

(39) Noncollision — details unknown

#### Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

(45) Breakaway pole or post (any diameter)

#### Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in  
diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object

#### Collision with Nonfixed Object

(71) Motor vehicle not in-transport

(72) Pedestrian

(73) Cyclist or cycle

(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object

B2611-137F

## OCCUPANT RELATED

16. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
17. Number of Occupants This Vehicle 01  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
18. Number of Occupant Forms Submitted 01

## 24. Rollover

(0) No rollover (no overturning)

*Rollover (primarily about the longitudinal axis)*

- (1) Rollover, 1 quarter turn only  
 (2) Rollover, 2 quarter turns  
 (3) Rollover, 3 quarter turns  
 (4) Rollover, 4 or more quarter turns (specify):  
2 complete rolls!

(5) Rollover--end-over-end (i.e., primarily about the lateral axis)

(9) Rollover (overturn), details unknown

## VEHICLE WEIGHT ITEMS

19. Vehicle Curb Weight 1,250  
1253 Code weight to nearest 10 kilograms.  
 (045) Less than 450 kilograms  
 (610) 6,100 kilograms or more  
 (999) Unknown
- \_\_\_\_\_, \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs
- Source: \_\_\_\_\_

20. Vehicle Cargo Weight 0000  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (450) 4,500 kilograms or more  
 (999) Unknown
- \_\_\_\_\_, \_\_\_\_\_ lbs X .4536 = \_\_\_\_\_ kgs

## RECONSTRUCTION DATA

21. Towed Trailing Unit 0  
 (0) No towed unit  
 (1) Yes--towed trailing unit  
 (9) Unknown
22. Documentation of Trajectory Data for This Vehicle 1  
 (0) No  
 (1) Yes
23. Post Collision Condition of Tree or Pole (For Highest Delta V) 0  
 (0) Not collision (for highest delta V) with tree or pole  
 (1) Not damaged  
 (2) Cracked/sheared  
 (3) Tilted <45 degrees  
 (4) Tilted ≥45 degrees  
 (5) Uprooted tree  
 (6) Separated pole from base  
 (7) Pole replaced  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## OVERRIDE/UNDERRIDE (THIS VEHICLE)

25. Front Override/Underride (this Vehicle) 026. Rear Override/Underride (this Vehicle) 0

(0) No override/underride, or not an end-to-end impact

*Override (see specific CDC)*

- (1) 1st CDC  
 (2) 2nd CDC  
 (3) Other not automated CDC (specify): \_\_\_\_\_

*Underride (see specific CDC)*

- (4) 1st CDC  
 (5) 2nd CDC  
 (6) Other not automated CDC (specify): \_\_\_\_\_

(7) Medium/heavy truck or bus override  
 (9) Unknown

## HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value  
 (997) Noncollision  
 (998) Impact with object  
 (999) Unknown

27. Heading Angle For This Vehicle 99828. Heading Angle For Other Vehicle 998

PSU, 11-137F

## OTHER DATA

### 56. Driver's Zip Code

- (00000) Driver not present  
(00001) Driver not a resident of U.S. or territories  
Code actual 5-digit zip code  
(99999) Unknown

### 57. Driver's Race/Ethnic Origin

- (0) Driver not present  
(1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(8) Other (specify):  
(9) Unknown

### 58. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

## ROLLOVER DATA

If GV07 (Body Type)  $\neq$  1-49, leave GV59-GV63 blank.  
If GV24 (Rollover) = 0, then GV59-GV63 must equal 0.  
If GV24 = 9, then GV59-GV63 must equal 9.

### 59. Rollover Initiation Type

- (0) No rollover  
(1) Trip-over  
(2) Flip-over  
(3) Turn-over  
(4) Climb-over  
(5) Fall-over  
(6) Bounce-over  
(7) Collision with another vehicle  
(8) Other rollover initiation type specify:  
(9) Unknown rollover initiation type

### 60. Location of Rollover Initiation

- (0) No rollover  
(1) On roadway  
(2) On shoulder—paved  
(3) On shoulder—unpaved  
(4) On roadside or divided trafficway (median)  
(9) Unknown

### 61. Rollover Initiation Object Contacted

### 62. Location on Vehicle Where Initial Principal Tripping Force Is Applied

- (0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify):

### (8) Non-contact rollover forces (specify):

- (8) *Centrifugal force on tires caused it to roll*  
(9) Unknown

### 63. Direction of Initial Roll

- (0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(5) End-over-end (i.e., primarily about the lateral axis)  
(9) Unknown roll direction

## PRECRASH DATA

### 64. Pre-Event Movement (Prior to Recognition of Critical Event)

- (01) Going straight  
(02) Slowing or stopping in traffic lane  
(03) Starting in traffic lane  
(04) Stopped in traffic lane  
(05) Passing or overtaking another vehicle  
(06) Disabled or parked in travel lane  
(07) Leaving a parking position  
(08) Entering a parking position  
(09) Turning right  
(10) Turning left  
(11) Making a U-turn  
(12) Backing up (other than for parking position)  
(13) Negotiating a curve  
(14) Changing lanes  
(15) Merging  
(16) Successful avoidance maneuver to a previous critical event  
(97) Other (specify):  
(98) No driver present  
(99) Unknown

## CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

### Noncollision

- (31) Turn-over — fall-over
- (33) Jackknife

### Collision With Fixed Object

- (41) Tree ( $\leq 10$  cm in diameter)
- (42) Tree ( $> 10$  cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

### Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq 10$  cm in diameter)
- (51) Pole or post ( $> 10$  cm but  $\leq 30$  cm in diameter)
- (52) Pole or post ( $> 30$  cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): \_\_\_\_\_

- (69) Unknown fixed object

### Collision with Nonfixed Object

- (71) Motor vehicle not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (88) Other nonfixed object (specify): \_\_\_\_\_

- (89) Unknown nonfixed object

- (98) Other event (specify): \_\_\_\_\_

- (99) Unknown event or object

## EXTERIOR VEHICLE FORM

## NATIONAL ACCIDENT SAMPLING SYSTEM CRASHWORTHINESS DATA SYSTEM

|   |  |
|---|--|
| 1. Primary Sampling Unit Number <u>11</u><br>2. Case Number - Stratum <u>137F</u> | 3. Vehicle Number <u>01</u><br><u>WOW</u> 3dr grey |
|---|--|

## VEHICLE IDENTIFICATION

VIN Y53AL35L1J3 Model Year 88  
Vehicle Make (specify): SAAB Vehicle Model (specify): 900 TURBO  
16 VALVE

## LOCATOR

**Locate the end of the damage with respect to the vehicle longitudinal center line or bumper corner for end impacts or an undamaged axle for side impacts.**

| Specific Impact No. | Location of Direct Damage                  | Location of Field L |
|---------------------|--|---------------------|
| 1-2                 | whole R side damaged by sideswiping median |                     |
| 3                   |  |                     |
|                     |  |                     |

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

**Measure and document on the vehicle diagram the location of maximum crush.**

**Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.**

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]

# ORIGINAL SPECIFICATIONS WORK SHEET

|                          |                 |        |         |   |                |    |
|--------------------------|-----------------|--------|---------|---|----------------|----|
| Wheelbase                | <u>  99.1  </u> | inches | x 2.54  | = | <u> 252 </u>   | cm |
| Overall Length           | <u> 184.5 </u>  | inches | x 2.54  | = | <u> 469 </u>   | cm |
| Maximum Width            | <u>  66.5 </u>  | inches | x 2.54  | = | <u> 169 </u>   | cm |
| Curb Weight              | <u> 2,763 </u>  | pounds | x .4536 | = | <u> 1,253 </u> | kg |
| Average Track            | <u>  56.6 </u>  | inches | x 2.54  | = | <u> 144 </u>   | cm |
| Front Overhang           | <u>      </u>   | inches | x 2.54  | = | <u> 107 </u>   | cm |
| Rear Overhang            | <u>      </u>   | inches | x 2.54  | = | <u> 110 </u>   | cm |
| Undeformed End Width     | <u>      </u>   | inches | x 2.54  | = | <u>      </u>  | cm |
| Engine Size: cyl./displ. | <u>      </u>   | cc     | x .001  | = | <u>      </u>  | L  |
|                          | <u>      </u>   | CID    | x .0164 | = | <u>      </u>  | L  |



### CODES FOR OBJECT CONTACTED

## Noncollision

- (39) Noncollision — details unknown**

**(45) Breakaway pole or post (any diameter)**

(54) Concrete traffic barrier  
(55) Impact attenuator  
(56) Other traffic barrier (includes guardrail)  
(specify):

- (57) Fence  
(58) Wall  
(59) Building  
(60) Ditch or culvert  
(61) Ground  
(62) Fire hydrant  
(63) Curb  
(64) Bridge  
(68) Other fixed object (specify):  

---

(69) Unknown fixed object

(99) Unknown event or object

[illegible]





## INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 11

2. Case Number - Stratum L37F

3. Vehicle Number 01

### INTEGRITY

4. Passenger Compartment Integrity 98

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

*LF window*  
*RB window*  
*Backlight*  
*[SUNROOF OPEN]*

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 0 8. RR 0 9. TG/H 2

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 8

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

2, 3, 5  
(9) Unknown

### GLAZING

Glazing Damage from Impact Forces

15. WS 4 16. LF 0 17. RF 0 18. LR 0 19. RR 6

20. BL 6 21. Roof 0 22. Other 0

(0) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(8) No glazing

(9) Unknown if damaged

Glazing Damage from Occupant Contact

23. WS 0 24. LF 0 25. RF 0 26. LR 0 27. RR 0

28. BL 0 29. Roof 0 30. Other 0

(0) No occupant contact to glazing or no glazing

(1) Glazing contacted by occupant but no glazing damage

(2) Glazing in place and cracked by occupant contact

(3) Glazing in place and holed by occupant contact

(4) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(5) Glazing out-of-place by occupant contact and holed by occupant contact

(6) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

If No Glazing Damage *And* No Occupant Contact or No Glazing, Then Code IV31 Through IV46 As 0

Type of Window/Windshield Glazing

31. WS 1 32. LF 0 33. RF 0 34. LR 0 35. RR 2

36. BL 2 37. Roof 0 38. Other 0

(0) No glazing contact and no damage, or no glazing

(1) AS-1 - Laminated

(2) AS-2 - Tempered

(3) AS-3 - Tempered-tinted

(4) AS-14 - Glass/Plastic

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

39. WS 1 40. LF 0 41. RF 0 42. LR 0 43. RR 1

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing contact and no damage, or no glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(9) Unknown

**Note: Sketch intruded areas**

**Note: Sketch intruded areas**

[illegible]

**Document no more than the 15 most severe intrusions**

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

|      | Location of Intrusion | Intruding Component | Magnitude of Intrusion | Dominant Crush Direction |
|------|-----------------------|---------------------|------------------------|--------------------------|
| 1st  | 47. _____             | 48. _____           | 49. _____              | 50. _____                |
| 2nd  | 51. _____             | 52. _____           | 53. _____              | 54. _____                |
| 3rd  | 55. _____             | 56. _____           | 57. _____              | 58. _____                |
| 4th  | 59. _____             | 60. _____           | 61. _____              | 62. _____                |
| 5th  | 63. _____             | 64. _____           | 65. _____              | 66. _____                |
| 6th  | 67. _____             | 68. _____           | 69. _____              | 70. _____                |
| 7th  | 71. _____             | 72. _____           | 73. _____              | 74. _____                |
| 8th  | 75. _____             | 76. _____           | 77. _____              | 78. _____                |
| 9th  | 79. _____             | 80. _____           | 81. _____              | 82. _____                |
| 10th | 83. _____             | 84. _____           | 85. _____              | 86. _____                |

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Door panel (side)
- (12) Roof (or convertible top)
- (13) Roof side rail
- (14) Windshield
- (15) Windshield header
- (16) Window frame
- (17) Floor pan (includes sill)
- (18) Backlight header
- (19) Front seat back
- (20) Second seat back
- (21) Third seat back
- (22) Fourth seat back
- (23) Fifth seat back
- (24) Seat cushion
- (25) Back door/panel (e.g., tailgate)
- (26) Other interior component (specify): \_\_\_\_\_

- (27) Side panel - forward of the A (A2)-pillar
- (28) Side panel - rear of the A (A2)-pillar

## Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## MAGNITUDE OF INTRUSION

- (1)  $\geq 3$  centimeters but  $< 8$  centimeters
- (2)  $\geq 8$  centimeters but  $< 15$  centimeters
- (3)  $\geq 15$  centimeters but  $< 30$  centimeters
- (4)  $\geq 30$  centimeters but  $< 46$  centimeters
- (5)  $\geq 46$  centimeters but  $< 61$  centimeters
- (6)  $\geq 61$  centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

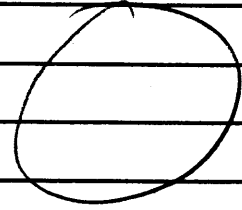
| COMPARISON VALUE | — | DAMAGE VALUE | = | DEFORMATION |
|------------------|---|--------------|---|-------------|
|------------------|---|--------------|---|-------------|

|  |   |  |   |  |
|--|---|--|---|--|
|  | — |  | = |  |
|--|---|--|---|--|

|  |   |  |   |  |
|--|---|--|---|--|
|  | — |  | = |  |
|--|---|--|---|--|

|  |   |  |   |  |
|--|---|--|---|--|
|  | — |  | = |  |
|--|---|--|---|--|

|  |   |  |   |  |
|--|---|--|---|--|
|  | — |  | = |  |
|--|---|--|---|--|



## STEERING COLUMN

## 87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

2

## 88. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X

## 89. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 90. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 91. Blank

(This variable is left blank so that numbering consistency can be maintained with the 1988-93 CDS.

X X X

## 92. Steering Rim/Spoke Deformation

Code actual measured deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

00

## 93. Location of Steering Rim/Spoke Deformation

(00) No steering rim deformation

00

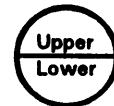
## Quarter Sections

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D



## Half Sections

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## INSTRUMENT PANEL

## 94. Odometer Reading

041,000

\_\_\_\_\_ kilometers—Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

25,525 miles  $\times 1.6093 =$  041,077 kilometers

Source: \_\_\_\_\_

## 95. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

1

## 96. Knee Bolsters Deformed from Occupant Contact?

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

8

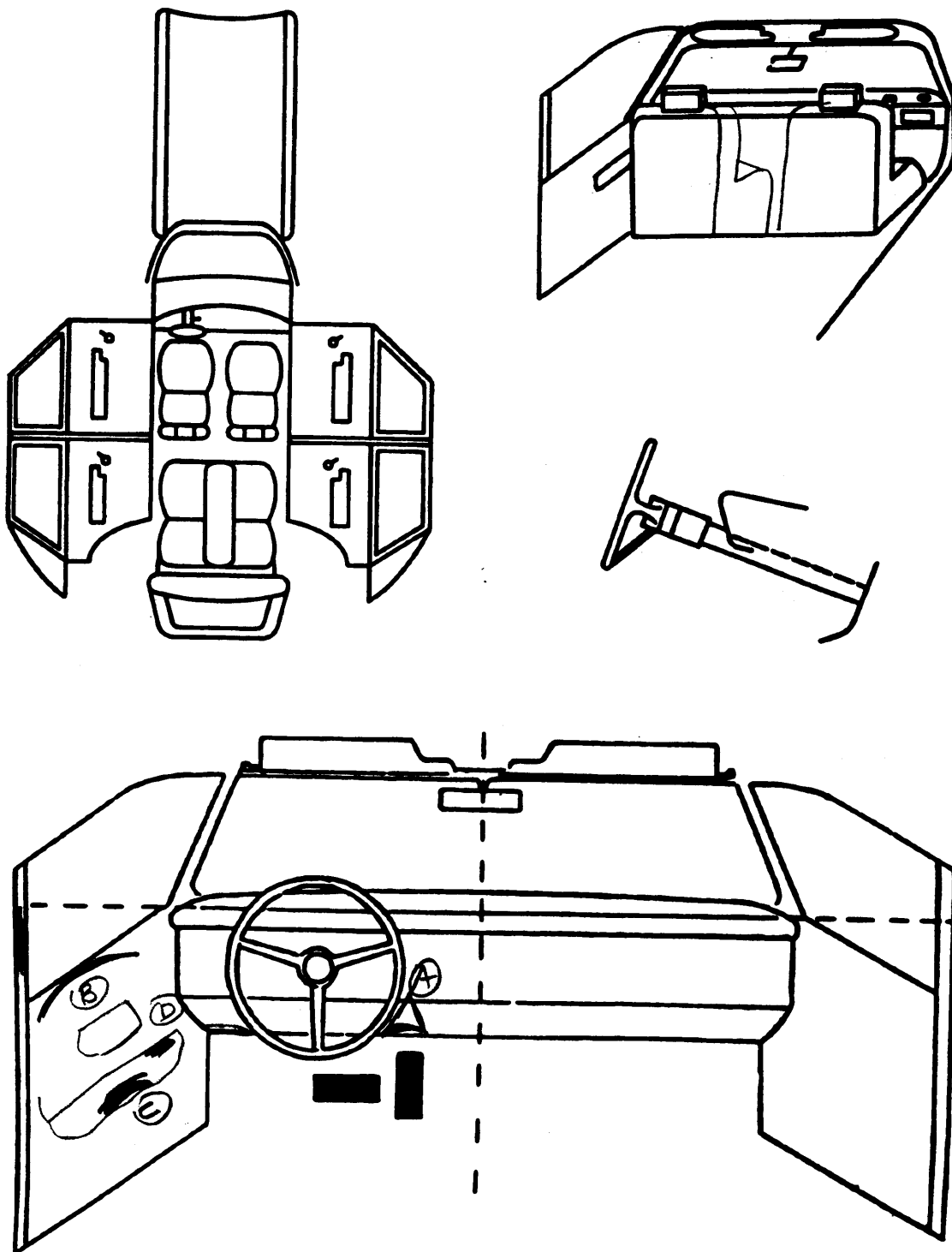
## 97. Did Glove Compartment Door Open During Collision(s)?

- (0) No  
 (1) Yes  
 (8) Not present  
 (9) Unknown

0

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).  
 Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.  
 Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

| Contact | Interior Component Contacted | Occupant No. If Known | Body Region If Known | Supporting Physical Evidence | Confidence Level of Contact Point |
|---------|------------------------------|-----------------------|----------------------|------------------------------|-----------------------------------|
| A       | 09                           | 1                     | (R) Knee             | scuffed                      | 1                                 |
| B       | 20                           | 1                     | (L) chest            | bowed outwards               | 1                                 |
| C       | 21                           | 1                     | (L) hip              | slightly dented              | 1                                 |
| D       | 21                           | 1                     | (R) knee             | slightly dented              | 1                                 |
| E       |                              |                       |                      |                              |                                   |
| F       |                              |                       |                      |                              |                                   |
| G       |                              |                       |                      |                              |                                   |
| H       |                              |                       |                      |                              |                                   |
| I       |                              |                       |                      |                              |                                   |
| J       |                              |                       |                      |                              |                                   |
| K       |                              |                       |                      |                              |                                   |
| L       |                              |                       |                      |                              |                                   |
| M       |                              |                       |                      |                              |                                   |
| N       |                              |                       |                      |                              |                                   |

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar

## (23) Left B-pillar

## (24) Other left pillar (specify): \_\_\_\_\_

## (25) Left side window glass or frame

## (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.

## (27) Other left side object (specify): \_\_\_\_\_

## (28) Left side window sill

## RIGHT SIDE

## (30) Right side interior surface, excluding hardware or armrests

## (31) Right side hardware or armrest

## (32) Right A (A1/A2)-pillar

## (33) Right B-pillar

## (34) Other right pillar (specify): \_\_\_\_\_

## (35) Right side window glass or frame

## (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B pillar, or roof side rail.

## (37) Other right side object (specify): \_\_\_\_\_

## (38) Right side window sill

## INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)

## (46) Other occupants (specify): \_\_\_\_\_

## (47) Interior loose objects

## (48) Child safety seat (specify): \_\_\_\_\_

## (49) Other interior object (specify): \_\_\_\_\_

## ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

## FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

## REAR

- (60) Backlight (rear window)
- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## AUTOMATIC RESTRAINTS

**NOTES:** Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

### AIR BAGS

|                       |                       | Left | Right |
|-----------------------|-----------------------|------|-------|
| F<br>I<br>R<br>S<br>T | Availability/Function |      |       |
|                       | Deployment            |      |       |
|                       | Failure               |      |       |

#### Air Bag System Availability/Function

- (0) Not equipped/not available  
 (1) Air bag  
*Non-functional*  
 (2) Air bag disconnected (specify): \_\_\_\_\_  
 (3) Air bag not reinstalled  
 (9) Unknown

#### Air Bag System Deployment

- (0) Not equipped/not available  
 (1) Air bag deployed during accident (as a result of impact)  
 (2) Air bag deployed inadvertently just prior to accident  
 (3) Air bag deployed, accident sequence undetermined  
 (4) Nondeployed  
 (5) Unknown if deployed  
 (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (9) Unknown

#### Did Air Bag System Fail?

- (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify): \_\_\_\_\_  
 (9) Unknown

### AUTOMATIC BELTS

|                       |                       | Left | Right |
|-----------------------|-----------------------|------|-------|
| F<br>I<br>R<br>S<br>T | Availability/Function | 1    | 1     |
|                       | Use                   | 1    | 1     |
|                       | Type                  | 2    | 2     |
|                       | Proper Use            | 1    | 1     |
|                       | Failure Modes         | 1    | 1     |

#### Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

#### Non-functional

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

#### Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
 (3) Automatic belt use unknown  
 (9) Unknown

#### Automatic (Passive) Belt System Type

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

#### Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

#### Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_  
 (8) Other improper use of automatic belt system (specify): \_\_\_\_\_  
 (9) Unknown

#### Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify): \_\_\_\_\_  
 (6) Broken retractor  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other automatic belt failure (specify): \_\_\_\_\_  
 (9) Unknown



## MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for **each seat position** in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**If a Child safety seat is present, encode the data on the back of this page.**

**If the vehicle has automatic restraints available, encode the appropriate data on the back of the previous page.**

|               |               | Left | Center                   | Right |
|---------------|---------------|------|--------------------------|-------|
| <b>FIRST</b>  | Availability  | 3    |                          | 3     |
|               | Use           | 03   |                          | 03    |
|               | Failure Modes | 1    |                          | 1     |
| <b>SECOND</b> | Availability  | 4    | 3                        | 4     |
|               | Use           | 64   | 00 Stashed<br>under seat | 00    |
|               | Failure Modes | 0    | 0                        | 0     |
| <b>THIRD</b>  | Availability  |      |                          |       |
|               | Use           |      |                          |       |
|               | Failure Modes |      |                          |       |
| <b>OTHER</b>  | Availability  |      |                          |       |
|               | Use           |      |                          |       |
|               | Failure Modes |      |                          |       |

### Manual (Active) Belt System Availability

- (0) None available  
(1) Belt removed/destroyed  
(2) Shoulder belt  
(3) Lap belt  
(4) Lap and shoulder belt  
(5) Belt available - type unknown

### ***Integral Belt Partially Destroyed***

- (6) Shoulder belt (lap belt destroyed/removed)  
(7) Lap belt (shoulder belt destroyed/removed)

- (8) Other belt (specify):**

- (9) Unknown

## Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):
- 
- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown

- (08) Other belt used (specify):**

- (12) Shoulder belt used with child safety seat  
 (13) Lap belt used with child safety seat  
 (14) Lap and shoulder belt used with child safety seat  
 (15) Belt used with child safety seat - type unknown  
 (18) Other belt used with child safety seat (specify):  
 (99) Unknown if belt used

### Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

---
- (6) Broken retractor
- (7) Combination of above (specify):

---
- (8) Other manual belt failure (specify):

---
- (9) Unknown

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

|                                    |  |  |  |  |  |  |  |
|------------------------------------|--|--|--|--|--|--|--|
| Occupant Number                    |  |  |  |  |  |  |  |
| 1. Type of Child Safety Seat       |  |  |  |  |  |  |  |
| 2. Child Safety Seat Orientation   |  |  |  |  |  |  |  |
| 3. Child Safety Seat Harness Usage |  |  |  |  |  |  |  |
| 4. Child Safety Seat Shield Usage  |  |  |  |  |  |  |  |
| 5. Child Safety Seat Tether Usage  |  |  |  |  |  |  |  |
| 6. Child Safety Seat Make/Model    | Specify Below for Each Child Safety Seat |  |  |  |  |  |  |

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage
- Note: Options Below Are Used for Variables 3-5.
- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

- 6. Child Safety Seat Make/Model
- (Specify make/model and occupant number)

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**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for **each seat position** in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

|               |                            | Left | Center | Right |
|---------------|----------------------------|------|--------|-------|
| <b>FIRST</b>  | Head Restraint Type/Damage | 1    |        | 1     |
|               | Seat Type                  | 02   |        | 02    |
|               | Seat Performance           | 1    |        | 1     |
|               | Seat Orientation           | 1    |        | 1     |
| <b>SECOND</b> | Head Restraint Type/Damage | 1    | 0      | 1     |
|               | Seat Type                  | 05   | 05     | 05    |
|               | Seat Performance           | 1    | 1      | 1     |
|               | Seat Orientation           | 1    | 1      | 1     |
| <b>THIRD</b>  | Head Restraint Type/Damage |      |        |       |
|               | Seat Type                  |      |        |       |
|               | Seat Performance           |      |        |       |
|               | Seat Orientation           |      |        |       |
| <b>OTHER</b>  | Head Restraint Type/Damage |      |        |       |
|               | Seat Type                  |      |        |       |
|               | Seat Performance           |      |        |       |
|               | Seat Orientation           |      |        |       |

**Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other Specify: \_\_\_\_\_

(9) Unknown

**Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_

(10) Box mounted seat (i.e., van type)

(99) Unknown

**Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed specify: \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other (specify): \_\_\_\_\_

(9) Unknown

**Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_

(9) Unknown

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE (I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

POSSIBLE

|  |      |  |  |  |  |  |
|--|------|--|--|--|--|--|
| Occupant Number                                    | 1    |  |  |  |  |  |
| Ejection   | 1    |  |  |  |  |  |
| (Note on Vehicle Interior Sketch)<br>Ejection Area | NONE |  |  |  |  |  |
| Ejection Medium                                    |      |  |  |  |  |  |
| Medium Status                                      | 1    |  |  |  |  |  |

**Ejection**

- (1) Complete ejection  
(1) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):  
\_\_\_\_\_

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):  
\_\_\_\_\_

**(5) Integral structure**

- (8) Other medium (specify):  
\_\_\_\_\_

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism: \_\_\_\_\_

Component(s): \_\_\_\_\_

(Note in vehicle interior diagram)



## OCCUPANT ASSESSMENT FORM

| OCCUPANT'S SEATING  |  |
|---|--|
| 1. Primary Sampling Unit Number <u>11</u>   | 10. Occupant's Seat Position <u>11</u> |
| 2. Case Number - Stratum <u>137E</u>  | <i>Front Seat</i>                      |
| 3. Vehicle Number <u>01</u>   | (11) Left side                         |
| 4. Occupant Number <u>01</u>  | (12) Middle                            |
| (13) Right side   |  |
| (14) Other (specify): _____   |  |
| (15) On or in the lap of another occupant   |  |
| <i>Second Seat</i>  |  |
| (21) Left side  |  |
| (22) Middle   |  |
| (23) Right side   |  |
| (24) Other (specify): _____   |  |
| (25) On or in the lap of another occupant   |  |
| <i>Third Seat</i>   |  |
| (31) Left side  |  |
| (32) Middle   |  |
| (33) Right side   |  |
| (34) Other (specify): _____   |  |
| (35) On or in the lap of another occupant   |  |
| <i>Fourth Seat</i>  |  |
| (41) Left side  |  |
| (42) Middle   |  |
| (43) Right side   |  |
| (44) Other (specify): _____   |  |
| (45) On or in the lap of another occupant   |  |
| (97) In or on unenclosed area   |  |
| (98) Other seat (specify): _____  |  |
| (99) Unknown  |  |
| 11. Occupant's Posture <u>0</u>   |  |
| (0) Normal posture  |  |
| <i>Abnormal posture</i>   |  |
| (1) Kneeling or standing on seat  |  |
| (2) Lying on or across seat   |  |
| (3) Kneeling, standing or sitting in front of seat  |  |
| (4) Sitting sideways or turned to talk with another occupant or to look out a rear window |  |
| (5) Sitting on a console  |  |
| (6) Lying back in a reclined seat position  |  |
| (7) Bracing with feet or hands on a surface in front of seat                              |  |
| (8) Other abnormal posture (specify): _____   |  |
| (9) Unknown   |  |

| OCCUPANT'S CHARACTERISTICS                            |  |
|---|--|
| 5. Occupant's Age <u>22</u>                           |  |
| Code actual age at time of accident.                  |  |
| (00) Less than one year old (specify by month): _____ |  |
| (97) 97 years and older                               |  |
| (99) Unknown  |  |
| 6. Occupant's Sex <u>1</u>                            |  |
| (1) Male  |  |
| (2) Female  |  |
| (9) Unknown   |  |
| 7. Occupant's Height <u>180</u>                       |  |
| Code actual height to the nearest centimeter.         |  |
| (999) Unknown   |  |
| <u>71</u> inches X 2.54 = <u>180</u> centimeters      |  |
| <u>5'11"</u>  |  |
| 8. Occupant's Weight <u>077</u>                       |  |
| Code actual weight to the nearest kilogram.           |  |
| (999) Unknown   |  |
| <u>170</u> pounds X .4536 = <u>077</u> kilograms      |  |
| 9. Occupant's Role <u>1</u>                           |  |
| (1) Driver  |  |
| (2) Passenger   |  |
| (9) Unknown   |  |

## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

2

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

2

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):  
LF window
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

4

## 15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

1

## 16. Entrapment

(NOTE: Entrapped means that part of the person was in the vehicle and mechanically restrained; jammed doors and immobilizing injuries by themselves are not sufficient to constitute entrapment.)

- (0) Not entrapped
- (1) Entrapped
- (9) Unknown

0

\* Occupant had <sup>car</sup> elbow outside the corner window when he hit the barrier. It appears his elbow scrapped the barrier and was scrapped here - not as the car rolled along

## RESTRAINT SYSTEM EVALUATION

17. Manual (Active) Belt System Availability 3

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)

(8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

18. Manual (Active) Belt System Use 03

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

(02) Shoulder belt \_\_\_\_\_

(03) Lap belt \_\_\_\_\_

(04) Lap and shoulder belt \_\_\_\_\_

(05) Belt used—type unknown \_\_\_\_\_

(08) Other belt used (specify): \_\_\_\_\_

(12) Shoulder belt used with child safety seat \_\_\_\_\_

(13) Lap belt used with child safety seat \_\_\_\_\_

(14) Lap and shoulder belt used with child safety seat \_\_\_\_\_

(15) Belt used with child safety seat—type unknown \_\_\_\_\_

(18) Other belt used with child safety seat (specify): \_\_\_\_\_

(99) Unknown if belt used \_\_\_\_\_

19. Proper Use of Manual (Active) Belts 1

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

20. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor \_\_\_\_\_

(7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Air Bag System Availability/Function 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Air Bag System Deployment 0

- (0) Not equipped/not available
- (1) Air bag deployed during accident (as a result of impact)
- (2) Air bag deployed inadvertently just prior to accident
- (3) Air bag deployed, accident sequence undetermined
- (4) Nondeployed
- (5) Unknown if deployed
- (6) Air bag deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (9) Unknown

23. Are There Indications of Air Bag System Failure? 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

Note: See Variables 44 through 48 (Page 5) for Information on Automatic Belts

24. Police Reported Restraint Use 4

- (0) None used
- (1) Police did not indicate restraint use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Other or automatic restraint (specify): \_\_\_\_\_

(8) Restrained, type unknown \_\_\_\_\_

(9) Police indicated "unknown" \_\_\_\_\_

## HEAD RESTRAINT AND SEAT EVALUATION

25. Head Restraint Type/Damage by Occupant  
at This Occupant Position1

- (0) No head restraints
- (1) Integral—no damage
- (2) Integral—damaged during accident
- (3) Adjustable—no damage
- (4) Adjustable—damaged during accident
- (5) Add-on—no damage
- (6) Add-on—damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

26. Seat Type (this Occupant Position)

02

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Other seat type (specify): \_\_\_\_\_
- (10) Box mounted seat (i.e., van type)
- (99) Unknown

27. Seat Performance (this Occupant Position)

1

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed
- (4) Seat track/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion  
(specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown



## CHILD SAFETY SEAT

## 28. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

## 29. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

## 30. Child Safety Seat Orientation

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

## 31. Child Safety Seat Harness Usage

## 32. Child Safety Seat Shield Usage

## 33. Child Safety Seat Tether Usage

Note: Options below applicable to Variables OA31-OA33.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

## INJURY CONSEQUENCES

34. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

35. Treatment - Mortality 6

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (8) Treatment - other (specify):
- (9) Unknown

36. Type Of Medical Facility (for Initial Treatment) 5

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):
- (9) Unknown

37. Hospital Stay 00

- (00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

38. Working Days Lost 00

- Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
  - (61) 61 days or more
  - (62) Fatally injured
  - (97) Not working prior to accident
  - (99) Unknown

**STOP - GO TO VARIABLE 44 ON PAGE 7****VARIABLES 39 THROUGH 43 ARE COMPLETED BY THE ZONE CENTER**39. Time to Death 00

- Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
- (00) Not fatal
  - (96) Fatal - ruled disease
  - (99) Unknown

40. 1st Medically Reported Cause of Death 0041. 2nd Medically Reported Cause of Death 0042. 3rd Medically Reported Cause of Death 00

- Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
- (00) Not fatal or no additional causes
  - (97) Other result (includes fatal ruled disease) (specify):

- (99) Unknown

43. Number of Recorded Injuries for This Occupant 01

- Code the actual number of injuries recorded for this occupant.
- (00) No recorded injuries
  - (97) Injured, details unknown
  - (99) Unknown if injured

**AUTOMATIC BELT SYSTEM****44. Automatic (Passive) Belt System Availability/Function** 1

- (0) Not equipped/not available  
 (1) 2 point automatic belts  
 (2) 3 point automatic belts  
 (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative  
 (9) Unknown

**45. Automatic (Passive) Belt System Use** 1

- (0) Not equipped/not available/destroyed or rendered inoperative  
 (1) Automatic belt in use  
 (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):  
 (3) Automatic belt use unknown  
 (9) Unknown

**46. Automatic (Passive) Belt System Type** 2

- (0) Not equipped/not available  
 (1) Non-motorized system  
 (2) Motorized system  
 (9) Unknown

**47. Proper Use of Automatic (Passive) Belt System** 1

- (0) Not equipped/not available/not used  
 (1) Automatic belt used properly  
 (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm  
 (4) Automatic shoulder belt worn behind back  
 (5) Automatic belt worn around more than one person  
 (6) Lap portion of automatic belt worn on abdomen  
 (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):  
 (9) Unknown

**48. Automatic (Passive) Belt Failure Modes During Accident** 1

- (0) Not equipped/not available/not in use  
 (1) No automatic belt failure(s)  
 (2) Torn webbing (stretched webbing not included)  
 (3) Broken buckle or latchplate  
 (4) Upper anchorage separated  
 (5) Other anchorage separated (specify):  
 (6) Broken retractor  
 (7) Combination of above (specify):  
 (8) Other automatic belt failure (specify):  
 (9) Unknown

**49. Seat Orientation (this Occupant Position)** 1

- (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown

**STOP - VARIABLES 50 THROUGH 52 ARE COMPLETED BY THE ZONE CENTER**

**TRAUMA DATA****50. Glasgow Coma Scale (GCS) Score** 02  
(at Medical Facility)

- (00) Not injured  
 (01) Injured - not treated at medical facility  
 (02) No GCS Score at medical facility  
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
 (97) Injured, details unknown  
 (99) Unknown if injured

**51. Was the Occupant Given Blood?** 1

- (1) No - blood not given  
 (2) Yes - blood given (specify units):  
 (9) Unknown if blood given

**52. Arterial Blood Gases (ABG) - HCO<sub>3</sub>** 01

- (00) Not injured  
 (01) Injured, ABGs not measured or reported  
 (02-50) Code the actual value of the HCO<sub>3</sub>  
 (96) ABGs reported, HCO<sub>3</sub> unknown  
 (97) Injured, details unknown  
 (99) Unknown if injured

**ARE ALL APPLICABLE MEDICAL RECORDS INCLUDED WITH INITIAL SUBMISSION?**

NO ☒ YES ☐

**UPDATE CANDIDATE?**

NO ☒ YES ☐



## OCCUPANT INJURY FORM

|                                 |             |                    |           |
|---------------------------------|-------------|--------------------|-----------|
| 1. Primary Sampling Unit Number | <u>11</u>   | 3. Vehicle Number  | <u>01</u> |
| 2. Case Number - Stratum        | <u>137E</u> | 4. Occupant Number | <u>01</u> |

### INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

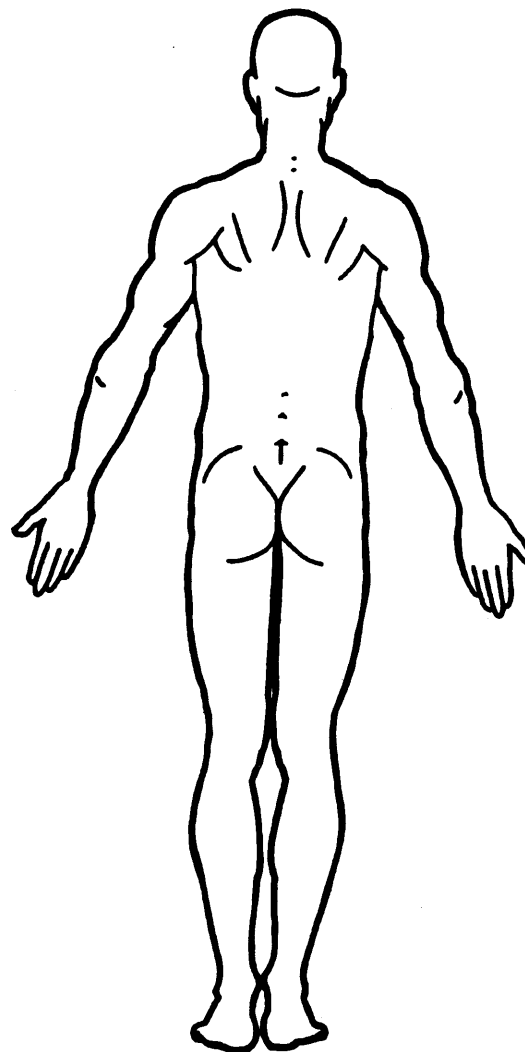
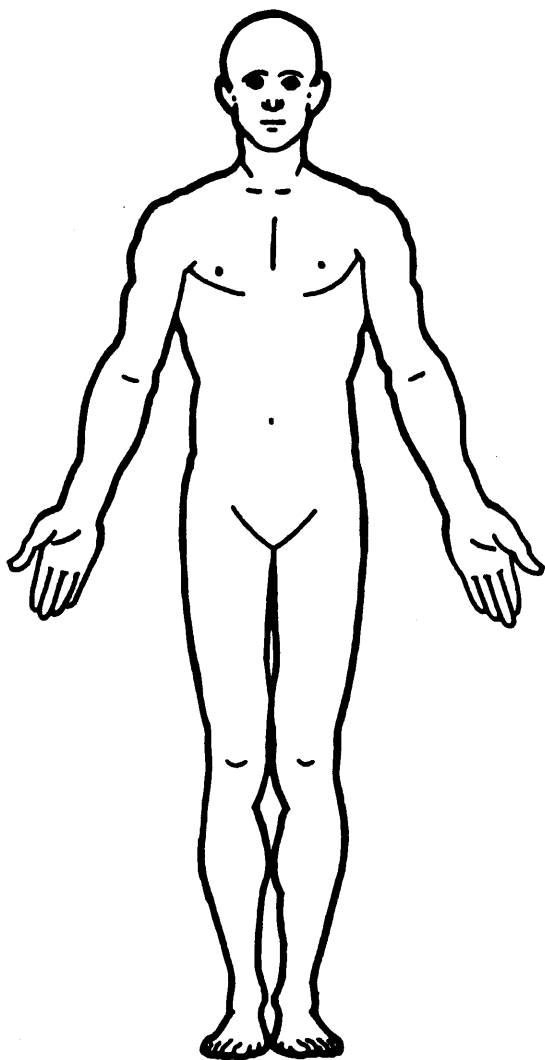
| Source<br>of Injury<br>Data | O.I.C.-A.I.S   |                                  |                                   |                    |                    |              |              | Injury<br>Source | Injury<br>Source<br>Confidence<br>Level | Direct/<br>Indirect<br>Injury | Occupant<br>Area<br>Intrusion<br>Number |
|-----------------------------|----------------|----------------------------------|-----------------------------------|--------------------|--------------------|--------------|--------------|------------------|---|-------------------------------|---|
|                             | Body<br>Region | Type of<br>Anatomic<br>Structure | Specific<br>Anatomic<br>Structure | Level of<br>Injury | A.I.S.<br>Severity | Aspect       |              |                  |   |                               |   |
| 1st                         | 5. <u>7</u>    | 6. <u>7</u>                      | 7. <u>9</u>                       | 8. <u>02</u>       | 9. <u>02</u>       | 10. <u>1</u> | 11. <u>2</u> | 12. <u>85</u>    | 13. <u>2</u>                            | 14. <u>1</u>                  | 15. <u>00</u>                           |
| 2nd                         | 16. ____       | 17. ____                         | 18. ____                          | 19. ____           | 20. ____           | 21. ____     | 22. ____     | 23. ____         | 24. ____                                | 25. ____                      | 26. ____                                |
| 3rd                         | 27. ____       | 28. ____                         | 29. ____                          | 30. ____           | 31. ____           | 32. ____     | 33. ____     | 34. ____         | 35. ____                                | 36. ____                      | 37. ____                                |
| 4th                         | 38. ____       | 39. ____                         | 40. ____                          | 41. ____           | 42. ____           | 43. ____     | 44. ____     | 45. ____         | 46. ____                                | 47. ____                      | 48. ____                                |
| 5th                         | 49. ____       | 50. ____                         | 51. ____                          | 52. ____           | 53. ____           | 54. ____     | 55. ____     | 56. ____         | 57. ____                                | 58. ____                      | 59. ____                                |
| 6th                         | 60. ____       | 61. ____                         | 62. ____                          | 63. ____           | 64. ____           | 65. ____     | 66. ____     | 67. ____         | 68. ____                                | 69. ____                      | 70. ____                                |
| 7th                         | 71. ____       | 72. ____                         | 73. ____                          | 74. ____           | 75. ____           | 76. ____     | 77. ____     | 78. ____         | 79. ____                                | 80. ____                      | 81. ____                                |
| 8th                         | 82. ____       | 83. ____                         | 84. ____                          | 85. ____           | 86. ____           | 87. ____     | 88. ____     | 89. ____         | 90. ____                                | 91. ____                      | 92. ____                                |
| 9th                         | 93. ____       | 94. ____                         | 95. ____                          | 96. ____           | 97. ____           | 98. ____     | 99. ____     | 100. ____        | 101. ____                               | 102. ____                     | 103. ____                               |
| 10th                        | 104. ____      | 105. ____                        | 106. ____                         | 107. ____          | 108. ____          | 109. ____    | 110. ____    | 111. ____        | 112. ____                               | 113. ____                     | 114. ____                               |

# OCCUPANT INJURY DATA

|      | Source<br>of Injury<br>Data | O.I.C.-A.I.S   |                                  |                                   |                    |                    |        | Injury<br>Source | Injury<br>Source<br>Confidence<br>Level | Direct/<br>Indirect<br>Injury | Occupant<br>Area<br>Intrusion<br>Number |
|------|-----------------------------|----------------|----------------------------------|-----------------------------------|--------------------|--------------------|--------|------------------|---|-------------------------------|---|
|      |                             | Body<br>Region | Type of<br>Anatomic<br>Structure | Specific<br>Anatomic<br>Structure | Level of<br>Injury | A.I.S.<br>Severity | Aspect |                  |   |                               |   |
| 11th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 12th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 13th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 14th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 15th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 16th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 17th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 18th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 19th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 20th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 21st | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 22nd | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 23rd | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 24th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |
| 25th | ---                         | ---            | ---                              | -----                             | -----              | ---                | ---    | -----            | ---                                     | ---                           | -----                                   |

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## SOURCE OF INJURY DATA

### OFFICIAL

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

### UNOFFICIAL

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

## INJURY SOURCE

### FRONT

- (01) Windshield
- (02) Mirror
- (03) Sunvisor
- (04) Steering wheel rim
- (05) Steering wheel hub/spoke
- (06) Steering wheel (combination of codes 04 and 05)
- (07) Steering column, transmission selector lever, other attachment
- (08) Add on equipment (e.g., CB, tape deck, air conditioner)
- (09) Left instrument panel and below
- (10) Center instrument panel and below
- (11) Right instrument panel and below
- (12) Glove compartment door
- (13) Knee bolster
- (14) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (15) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (16) Driver side air bag compartment cover
- (17) Passenger side air bag compartment cover
- (18) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (19) Other front object (specify): \_\_\_\_\_

### LEFT SIDE

- (20) Left side interior surface, excluding hardware or armrests
- (21) Left side hardware or armrest
- (22) Left A (A1/A2)-pillar
- (23) Left B-pillar
- (24) Other left pillar (specify): \_\_\_\_\_

- (25) Left side window glass or frame
- (26) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (27) Other left side object (specify): \_\_\_\_\_

- (28) Left side window sill

### RIGHT SIDE

- (30) Right side interior surface, excluding hardware or armrests
- (31) Right side hardware or armrest
- (32) Right A (A1/A2)-pillar
- (33) Right B-pillar
- (34) Other right pillar (specify): \_\_\_\_\_

- (35) Right side window glass or frame
- (36) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (37) Other right side object (specify): \_\_\_\_\_

- (38) Right side window sill

### INTERIOR

- (40) Seat, back support
- (41) Belt restraint webbing/buckle
- (42) Belt restraint B-pillar or door frame attachment point
- (43) Other restraint system component (specify): \_\_\_\_\_
- (44) Head restraint system
- (45) Air bag (use codes "16" and "17" for injuries sustained from air bag compartment covers)
- (46) Other occupants (specify): \_\_\_\_\_
- (47) Interior loose objects
- (48) Child safety seat (specify): \_\_\_\_\_
- (49) Other interior object (specify): \_\_\_\_\_

### ROOF

- (50) Front header
- (51) Rear header
- (52) Roof left side rail
- (53) Roof right side rail
- (54) Roof or convertible top

### FLOOR

- (56) Floor (including toe pan)
- (57) Floor or console mounted transmission lever, including console
- (58) Parking brake handle
- (59) Foot controls including parking brake

### REAR

- (60) Backlight (rear window)

- (61) Backlight storage rack, door, etc.
- (62) Other rear object (specify): \_\_\_\_\_

### EXTERIOR of OCCUPANT'S VEHICLE

- (65) Hood
- (66) Outside hardware (e.g., outside mirror, antenna)
- (67) Other exterior surface or tires (specify): \_\_\_\_\_
- (68) Unknown exterior objects

### EXTERIOR OF OTHER MOTOR VEHICLE

- (70) Front bumper
- (71) Hood edge
- (72) Other front of vehicle (specify): \_\_\_\_\_

- (73) Hood
- (74) Hood ornament
- (75) Windshield, roof rail, A-pillar
- (76) Side surface
- (77) Side mirrors
- (78) Other side protrusions (specify): \_\_\_\_\_

- (79) Rear surface
- (80) Undercarriage
- (81) Tires and wheels
- (82) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (83) Unknown exterior of other motor vehicle

### OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (84) Ground
- (85) Other vehicle or object (specify) New Jersey Barrier
- (86) Unknown vehicle or object

### NONCONTACT INJURY

- (90) Fire in vehicle
- (91) Flying glass
- (92) Other noncontact injury source (specify): \_\_\_\_\_
- (93) Air bag exhaust gases
- (97) Injured, unknown source

## INJURY SOURCE CONFIDENCE LEVEL

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

## DIRECT/INDIRECT INJURY

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OCCUPANT INJURY CLASSIFICATION

### Body Region

- (1) Head
- (2) Face
- (3) Neck
- (4) Thorax
- (5) Abdomen
- (6) Spine
- (7) Upper Extremity
- (8) Lower Extremity
- (9) Unspecified

### Type of Anatomic Structure

- (1) Whole Area
- (2) Vessels
- (3) Nerves
- (4) Organs (includes muscles/ligaments)
- (5) Skeletal (includes joints)
- (6) Head - LOC
- (9) Skin

### Specific Anatomic Structure

#### Whole Area

- (02) Skin - Abrasion
- (04) Skin - Contusion
- (06) Skin - Laceration
- (08) Skin - Avulsion
- (10) Amputation
- (20) Burn
- (30) Crush
- (40) Degloving
- (50) Injury - NFS
- (90) Trauma, other than mechanical

#### Head - LOC

- (02) Length of LOC
- (04, 06, 08) Level of Consciousness
- (10) Concussion

### Spine

- (02) Cervical
- (04) Thoracic
- (06) Lumbar

Vessels, Nerves, Organs, Bones, Joints are assigned consecutive two digit numbers beginning with 02

### Level of Injury

Specific injuries are assigned consecutive two-digit numbers beginning with 02.

To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.

### Abbreviated Injury Scale

- (1) Minor injury
- (2) Moderate injury
- (3) Serious injury
- (4) Severe injury
- (5) Critical injury
- (6) Maximum (untreatable)
- (7) Injured, unknown severity

### Aspect

- (1) Right
- (2) Left
- (3) Bilateral
- (4) Central
- (5) Anterior
- (6) Posterior
- (7) Superior
- (8) Inferior
- (9) Unknown
- (0) Whole region



# OFFICIAL INJURY DATA — SKELETAL INJURIES

Restrained?

☐ No

☐ Yes

Blood Alcohol  
Level (mg/dl)

BAL =

Glasgow Coma  
Scale Score

GCSS =

Units of Blood  
Given

Units =

Arterial Blood  
Gases

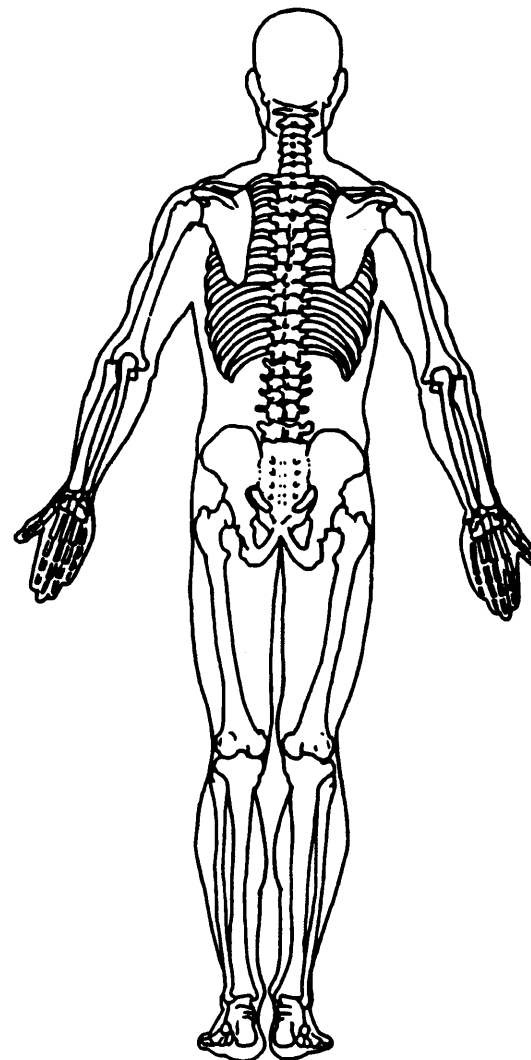
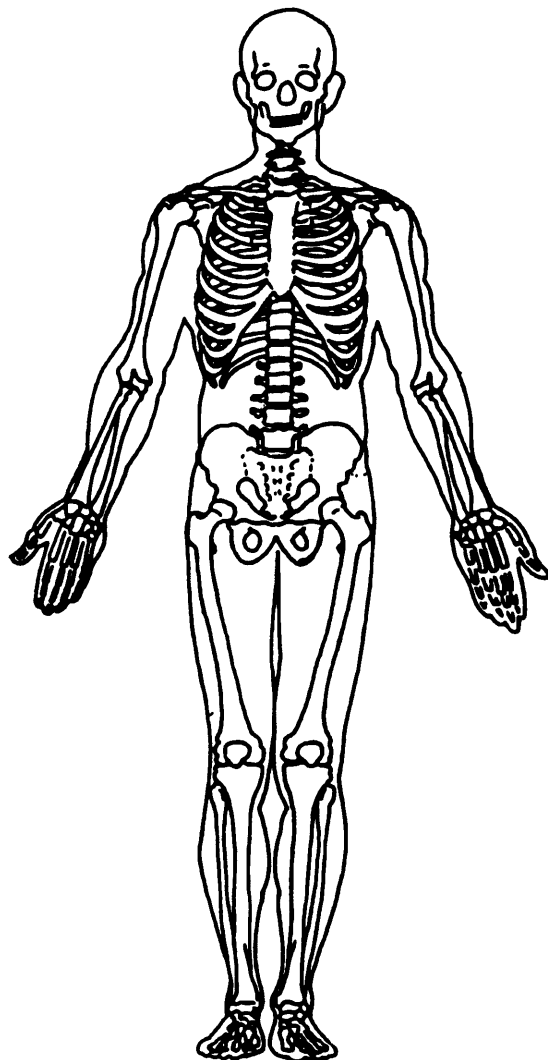
pH =

PO<sub>2</sub> =

PCO<sub>2</sub>

HCO<sub>3</sub>

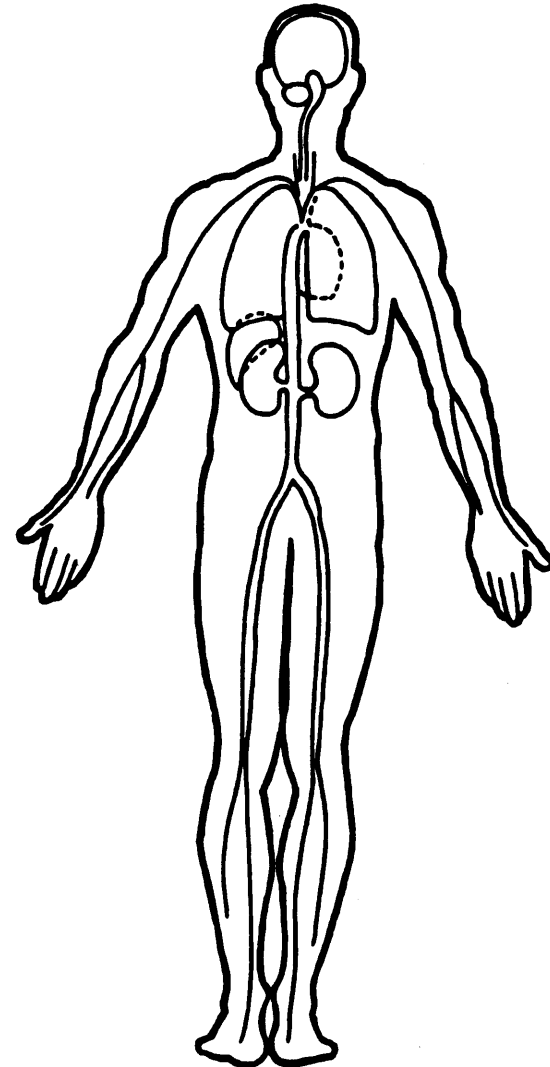
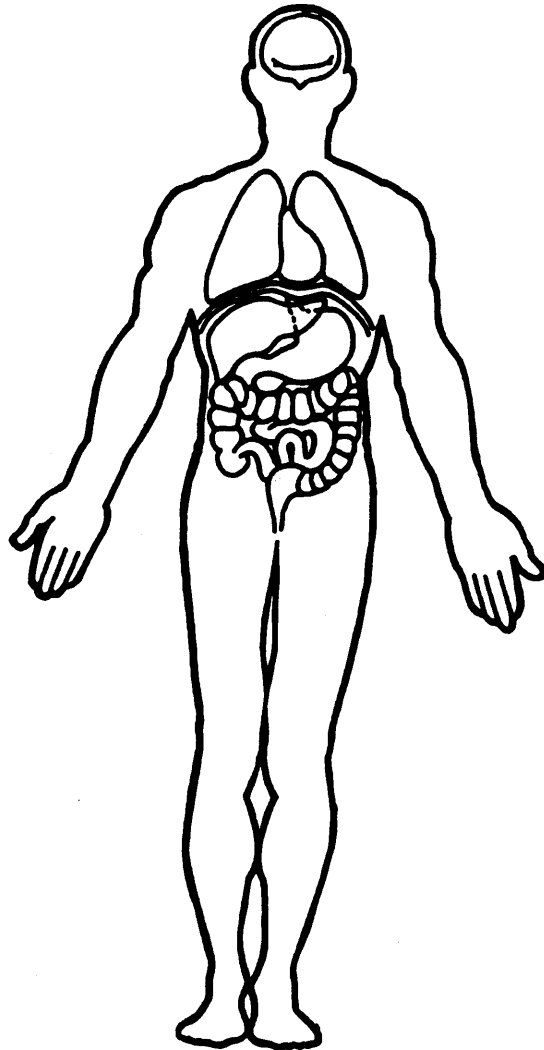
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



| FORM NAME           | NUMBER OF<br>DOLLAR SIGNS | NUMBER OF<br>LEVEL 1<br>ERRORS | NUMBER OF<br>LEVEL 2<br>ERRORS | VERSION<br>NUMBER<br>CONSISTENT |
|---------------------|---------------------------|--------------------------------|--------------------------------|---------------------------------|
| Accident            | 0                         | 0                              | 0                              | Y                               |
| General Vehicle     | 0                         | 0                              | 0                              | Y                               |
| Vehicle Exterior    | 0                         | 0                              | 0                              | Y                               |
| Vehicle Interior    | 0                         | 0                              | 1                              | Y                               |
| Occupant Assessment | 0                         | 0                              | 1                              | Y                               |
| Occupant Interior   | 0                         | 0                              | 0                              | Y                               |
| Total Inter Errors  |                           | 0                              | 1                              |                                 |
| Total Case Errors   | 0                         | 0                              | 3                              |                                 |

## SLIDE INDEX

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

[illegible]

[illegible]



PSU 11-137F (1993) #1



PSU 11-137F (1993) #2



PSU 11-137F (1993) #3



PSU 11-137F (1993) #4





PSU 11-137F (1993) #5



PSU 11-137F (1993) #6



PSU 11-137F (1993) #7



PSU 11-137F (1993) #8



PSU 11-137F (1993) #9



PSU 11-137F (1993) #10



PSU 11-137F (1993) #11



PSU 11-137F (1993) #12





PSU 11-137F (1993) #13



PSU 11-137F (1993) #14



PSU 11-137F (1993) #15



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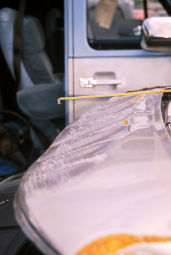
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PSU 11-137F (1993) #56



**PSU 11-137F (1993) #57**



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